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P.O. Box 711
Tucson, Arizona 85702

UniSourceEnergy
SERVICES

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2011 APR - 1 P 1:2b

AZ CORP COMMISSION
DOCKET CONTROL

April 1, 2011

Docket Control
Arizona Corporation Commission
1200 West Washington
Phoenix, Arizona 85007

Re: Docket No. E-00000A-11-0113 – UNS Electric, Inc.
Annual Resource Planning and Procurement Filing of Historical Data 2010
Arizona Administrative Code (“A.A.C.”) R14-2-703, Sections A. & B.

Enclosed please find an original and thirteen copies of UNS Electric, Inc.’s (“UNS Electric”) Resource Planning and Procurement Information for the Historical Year 2010, pursuant to A.A.C. R14-2-703. The UNS Electric hourly load data is being provided electronically to Commission Staff.

If you have any questions regarding this filing, please feel free to contact me at (520) 884-3680.

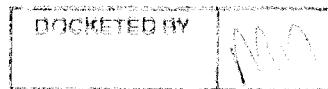
Sincerely,

Jessica Bryne
Regulatory Services

cc: Barbara Keene, ACC (w/CD)
Compliance, ACC

Arizona Corporation Commission
DOCKETED

APR - 1 2011



UNS Electric, Inc.

Resource Planning and Procurement Rules

2010 Historical Data Information

A.A.C. R14-2-703

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Section R14-2-703 –A. Demand-Side Data

A load-serving entity shall, by April 1 of each year, file with Docket Control a compilation of the following items of demand-side data, including for each item for which no record is maintained the load-serving entity's best estimate and a full description of how the estimate was made:

1. Hourly demand for the previous calendar year, disaggregated by:
 - a. Sales to end users;
 - b. Sales for resale;
 - c. Energy losses; and
 - d. Other disposition of energy, such as energy furnished without charge and energy used by the load serving entity.
2. Coincident peak demand (megawatts) and energy consumption (megawatt-hours) by month for the previous 10 years, disaggregated by customer class;
3. Number of customers by customer class for each of the previous 10 years; and
4. Reduction in load (kilowatt and kilowatt-hours) in the previous calendar year due to existing demand management measures, by type of demand management measure.

Section R14-2-703 – B. Supply-Side Data

A load-serving entity shall by, April 1 of each year, file with Docket Control a compilation of the following items of supply-side data, including for each item for which no record is maintained the load-serving's best estimate and a full description of how the estimate was made.

1. For each generating unit and purchased power contract for the previous calendar year:
 - a. In-service date and book life or contract period;
 - b. Type of generating unit or contract;
 - c. The load-serving entity's share of the generating units capacity, or of capacity under contract, in megawatts;
 - d. Maximum generating unit or contract capacity, by hour, day, or month, if such capacity varies during the year;
 - e. Annual capacity factor (generating units only);
 - f. Average heat rate of generating units and, if available, heat rates at selected output levels;
 - g. Average fuel cost for generating units, in dollars per million Btu for each type of fuel.
 - h. Other variable operating and maintenance costs for generating units, in dollars per megawatt-hour;
 - i. Purchased power energy costs for long-term contracts, in dollars;
 - j. Fixed operating and maintenance costs of generating units, in dollars per megawatt;
 - k. Demand charges for purchased power;

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- I. Fuel type for each generating unit;
 - m. Minimum capacity at which the generating unit would be or power must be purchased;
 - n. Whether, under standard operating procedures, the generating unit must be run if it is available to run;
 - o. Description of each generating unit as base load, intermediate, or peaking;
 - p. Environmental impacts, including air emission quantities (in metric tons or pounds) and rates (in quantities per megawatt-hour) for carbon dioxide, nitrogen oxides, sulfur dioxide, mercury, particulates, and other air emissions subject to current or expected future environmental regulation;
 - q. Water consumption quantities and rates; and
 - r. Tons of coal ash produced per generating unit.
2. For the power supply system for the previous calendar year:
- a. A description of generating unit commitment procedures;
 - b. Production cost;
 - c. Reserve requirements;
 - d. Spinning reserve;
 - e. Reliability of generating, transmission, and distribution systems;
 - f. Purchase and sale prices, averaged by month, for the aggregate of all purchased and sales related to short-term contracts; and
 - g. Energy losses.
3. The level of self generation in the load-serving entity's service area for the previous calendar year; and
4. An explanation of any resource procurement processes used by the load-serving entity during the previous calendar year that did not include use of an RFP, including the exception under which the process was used.

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R14-2-703, Section A.1.a

The 2010 hourly UNS Electric retail load is on the following pages. All values in MW.

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R14-2-703, Section A.1.b

UNS Electric delivered approximately 2,680 MWh of 'sales for resale' energy to a customer in Sonora, Mexico in 2010.

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R14-2-703, Section A.1.c

The following pages contain the UNS Electric hourly losses. The estimated losses are calculated hourly using hourly distribution and transmission numbers including billed and unbilled retail sales. Due to the estimate of unbilled revenue, losses can be estimated as negative on an hourly basis.

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R14-2-703, Section A.1.d

The following pages contain the UNS Electric company uses. The usage is estimated hourly using metered monthly totals.

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R14-2-703, Section A.2

This information is in the process of being compiled and will be supplemented on a later date.

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R14-2-703, Section A.3

Retail Customers by Class

Year-end	Residential	Commercial	Industrial	Mining	Other	Total
2001						
2002						
2003	67,592	9,032	1	-	605	77,230
2004	71,181	9,583	9	-	251	81,024
2005	74,589	9,694	7	-	250	84,540
2006	78,204	10,068	24	-	248	88,544
2007	79,433	10,291	13	-	254	89,991
2008	79,149	10,347	20	-	259	89,775
2009	79,641	10,335	24	1	266	90,267
2010	80,257	10,346	22	2	254	90,881

* 2003 was UNS Electric acquisition year

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R14-2-703, Section A.4

Distributed Generation

	KWh
Total Distributed Generation	3,580,187

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R14-2-703, Sections B.1.a-h, j, l-o and B.2.b.

Sections B.1.a-h, j, l-o and B.2.b. are on the following page.

U.S. ELECTRIC POWER
2011 RESOURCE PLANNING ANNUAL FILING
FOR HISTORICAL YEAR 2010

R14-2-703 Section:

PLANT B.1	(B.1.a) IN SERVICE	(B.1.b) BOOK LIFE	(B.1.c) CAPACITY MW (USE SHARE)	(B.1.d) CAPACITY MW (IF VARIES)	(B.1.e) FORCED OUTAGE RATE	(B.1.f) AVERAGE HEAT RATE BTU/KWH (1)	(B.1.g) FUEL COSTS \$/MMBTU (2)		(B.1.h) O&M EXPENSES (\$/kW-Mo)	(B.1.i) FUEL TYPE	(B.1.m) MINIMUM CAPACITY	(B.1.n) UNIT MUST BE RUN IF AVAILABLE	(B.1.o) Base Load, Intermediate or Peaking	(B.1.p) MAINTENANCE SCHEDULE	(B.2.b) PRODUCTION COST K\$
							(B.1.a) Fixed O&M (\$/Mo)	(B.1.a) OM (\$/kWh)							
Valencia CT1 1892	2019	25	25	25	0.00%	19,785 (5)	\$	3.39	\$	119	Gas	25	No	Peaking	04/04-04/049
Valencia CT2 1892	2019	25	25	25	0.00%	18,472 (5)	\$	3.39	\$	119	Gas	25	No	Peaking	04/11-04/116
Valencia CT3 6/1/2001	2019	23	23	23	0.00%	15,824 (5)	\$	3.39	\$	119	Gas	23	No	Peaking	04/18-04/23
Valencia CT4	2046	21	21	21	0.00%	14,224 (5)	\$	3.39	\$	161	Gas	21	No	Peaking	03/28-04/02
															7,152

NOTES:

(1) Values reflect unit dispatch heat rate.

(2) Values reflect aggregate station fuel costs for entire year.

(3) Operating and Maintenance costs reflect total annual station costs (fixed and variable) \$/kW-ho basis.

(4) Reflects annual cost for all four Valencia units.

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R14-2-703, Section B.1.i and B.1.k

PURCHASE POWER CONTRACTS	(B.1.i)	(B.1.k)	
Firm Purchase Power Contracts	Capacity (MW)	Energy Cost (\$/MWh)	Demand \$
BMGS Tolling Agreement	90 MW	\$ 44.53	\$ 10,260,000
Short-Term Purchases	75 MW	\$ 52.10	\$ 533,540
Short-Term Purchases	225 MW	\$ 54.09	
TOTAL	390		\$ 10,793,540

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R14-2-703, Section B.1.p, q, and r**B.1.p.**

Air Emissions, Pounds	SO ₂	NOx	CO ₂	PM	Hg	Water (Acre Feet)
Black Mountain	1,600	65,800	93,874,000	5,856	0.201	40.2
Valencia	33	1,928	1,667,800	2,324	0.079	11
Total Pounds	1,633	67,728	95,541,800	8,180	0.280	50.8

B.1.q.

Air Emissions, lbs/MWh	SO ₂	NOx	CO ₂	PM	Hg	Water (Gal/MWh)
Black Mountain	0.02	0.75	1,074.06	0.07	2.30E-06	150
Valencia	0.00	0.08	72.98	0.10	3.47E-06	150

Notes:

Particulate matter, mercury and water consumption for natural gas facilities are based industry averages for similar units.

B.1.r. UNS Electric has no Coal generation.

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R14-2-703, Section B.2.a, c, d and g

- 2.a.** The Valencia turbines are dispatched for emergency backup and economic purposes.
- 2.c.** The UNS Electric operating reserve requirement is covered under the TEP Control Area Services Agreement
- 2.d.** The UNS Electric spinning reserve requirement is covered under the TEP Control Area Services Agreement.
- 2.g.** The UNS Electric energy losses were estimated at 102.9 MWh for 2010

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R14-2-703, Section B.2.e

Performance Indices	Unisource Energy Services
CAIDI	64,719
SAIFI	1.058
MAIFI	3.838
SAIDI	68.457
Customer Outage Minutes	6,233,324
Customer Outage Hours	103,889
Number of Sustained Customer Interruptions	96,313
Number of Momentary Customer Interruptions	349,433
Major Event Days	n/a

* Overall UES Reliability Indices, which includes outages for both the Mohave and Santa Cruz Districts.

Major Event Days	Acronym
21-Jan	Broken 69 kV poles due to storms

Definitions	Acronym	Description
Customer Average Interruption Duration Index	CAIDI	Average Length of Time Customers Involved in Sustained Outages Were Without Power
System Average Interruption Frequency Index	SAIFI	Average Number of Sustained Interruptions per Customer
System Average Interruption Duration Index	SAIDI	Average Number of Outage Minutes per Customer
Momentary Average Interruption Frequency Index	MAIFI	Average Number of Momentary Interruptions per Customer
Major Event Day	MED	A day in which the distribution system is subjected to forces exceeding reasonable design and operational limits

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R14-2-703, Section B.2.f

Sales for Resale				Purchased Power		
	\$	KWh	\$/KWh	\$	KWh	\$/KWh
January 2011	1,029,619	23,546,000	\$0.0437	9,469,307	171,784,000	\$0.0551
February 2011	1,027,309	23,140,000	\$0.0444	8,590,619	156,117,000	\$0.0550
March 2011	953,823	22,290,000	\$0.0428	7,949,799	165,218,000	\$0.0481
April 2011	908,510	21,384,000	\$0.0425	7,693,183	156,991,000	\$0.0490
May 2011	2,529,063	61,876,000	\$0.0409	10,036,345	200,867,000	\$0.0500
June 2011	2,750,279	65,422,000	\$0.0420	12,173,701	251,050,000	\$0.0485
July 2011	4,332,301	84,092,000	\$0.0515	15,570,457	315,225,000	\$0.0494
August 2011	4,239,166	85,193,000	\$0.0498	15,056,230	326,559,000	\$0.0461
September 2011	3,951,627	86,312,000	\$0.0458	13,763,943	328,777,000	\$0.0419
October 2011	3,047,218	75,428,000	\$0.0404	10,967,108	227,852,000	\$0.0481
November 2011	3,466,105	92,382,000	\$0.0375	10,559,300	235,209,000	\$0.0449
December 2011	2,610,907	62,883,000	\$0.0415	10,036,249	216,931,000	\$0.0463
Total	30,845,927	703,948,000	\$0.0438	131,866,241	2,752,580,000	\$0.0479

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R14-2-703, Section B.3

MWh

Self Generation within Load Serving Service Area	0
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R14-2-703, Section B.4

In 2010, UNS Electric relied on the procurement methods described in Section R14-2-705.A of the Procurement Rules in its acquisition of energy, capacity and physical hedge transactions. UNS Electric did not rely on any exceptions as described in Section R14-2-705.B of the Procurement Rules.